CENTER FOR DRUG EVALUATION AND RESEARCH APPROVAL PACKAGE FOR:

APPLICATION NUMBER 21-321

Correspondence

Redacted 19

pages of trade

secret and/or

confidential

commercial

information



October 30, 2001-

Raymond J. Lipicky, M.D.
Food and Drug Administration
Center for Drug Evaluation and Research
Division of Cardio-Renal Drug Products
Attention: Document Control Room, HFD-110
1451 Rockville Pike
Rockville, MD 20852



RE: NDA 21-321

Extraneal™ (7.5% icodextrin) Peritoneal Dialysis Solution

Minor Amendment - 12 Proposed Draft Labeling

Dear Dr. Lipicky:

Baxter Healthcare Corporation acknowledges receipt of the Approvable Letter for NDA 21-321 by fax on October 22, 2001 and by mail on October 26, 2001. In response to this action letter and in accordance with 21 CFR 314.60, Baxter Healthcare Corporation is amending NDA 21-321 to include proposed draft labeling. This draft labeling is in response to the marked—up draft labeling included with the Approvable Letter.

Comments from the marked-up draft which were acceptable to Baxter or did not require or request sponsor input have been incorporated into the proposed labeling without highlighting. Those comments requesting sponsor input have been addressed as bolded, underlined text in the labeling and with a bolded reference or description in the right hand column. In addition, editorial/typographical comments have been identified in this same manner.

The amendment includes a version of the proposed label as described in the preceding paragraph, a version of text without sponsor comments, and electronic copies in pdf and Word.

Baxter Healthcare Corporation has accepted most of Dr. Temple's comments. There are two sections for which alternative proposals have been incorporated into the draft label:

1. The section "Clinical Studies – Ultrafiltration, Urea and Creatinine Clearance, Negative Net Ultrafiltration" (page 5-6) had been reorganized by Dr. Temple into CAPD data followed by APD data. The which had been a separate paragraph at the end of the section, was removed during the reorganization of this section. Baxter has included this integral and critical UF data by CAPD and APD to follow with Dr. Temple's organization of this section.

2. In the section "INDICATIONS AND USAGE" the second paragraph had been removed.

Baxter proposes modifying this section by described in a key section of the package insert for prescribing physicians.

Baxter would appreciate a response to the proposed draft labeling at the Division's earliest convenience. If the proposed labeling is acceptable, Baxter will submit final printed labeling and will not require the meeting with Dr. Temple scheduled for November 9, 2001 from 2:00 - 3:30pm EST.

Please do not hesitate to contact me at 847-473-6361 if you have any questions or comments.

Sincerely yours,

Mary Kay Rybicki

Associate Director, Regulatory Affairs

DEPARTMENT OF HEALTH AND HUMAN SERVICES

FOOD AND DRUG ADMINISTRATION

APPLICATION TO MARKET A NEW DRUG, BIOLOGIC, OR AN ANTIBIOTIC DRUG FOR HUMAN USE

Form Approved: OMB No. 0910-0338 Expiration Date: March 31, 2003 See OMB Statement on page 2.

APPLICATION NUMBER

FO	R	FD	A	USE	ONL	١

(Title 21, Code of Fede	ral Regulations, I	Parts 314 & 60	1)			
APPLICANT INFORMATION						
VAME OF APPLICANT		•.	DATE OF SUBM	IISSION		
Baxter Healthcare Corpora	tion		October	30, 2	001	
TELEPHONE NO. (Include Area Code) 847-4	73-6361		FACSIMILE (FA	X) Numbe	or (Include Area Code) 847-47:	3-6952
APPLICANT ADDRESS (Number, Street, City, Sta and U.S. License number if previously issued):	ate, Country, ZIP Code	e or Mail Code,			NT NAME & ADDRESS (Number, St AX number) IF APPLICABLE	reet, City, State,
1620 Waukegan Road						
McGaw Park, IL 60085						
PRODUCT DESCRIPTION						
NEW DRUG OR ANTIBIOTIC APPLICATION NUM	MBER, OR BIOLOGIC	CS LICENSE APPL	ICATION NUMBER	R (If previ	iously issued) NDA 21-321	
ESTABLISHED NAME (e.g., Proper name, USP/L	JSAN name)	PR	OPRIETARY NAMI	E (trade n	name) IF ANY Extraneal	
CHEMICAL/BIOCHEMICAL/BLOOD PRODUCTN	iAME (If any) alph	na 1,4 polygl	ucopyranose	9	CODE NAME (If any)	<u>. </u>
DOSAGE FORM: PD Solution	STRENGTHS: 7.	.5% w/v			OF ADMINISTRATION: Intraperitoneal	
(PROPOSED) INDICATION(S) FOR USE:						
Treatment of Chronic Renal Fai	lure					
APPLICATION INFORMATION						
APPLICATION TYPE (creeck one)	TON (21 CFR 314.50)			RUG APF	PLICATION (ANDA, 21 CFR 314.94)	r
IF AN NDA, IDENTIFY THE APPROPRIATE TYP			05 (b)(2)	•		
IF AN ANDA, OR 505(b)(2), IDENTIFY THE REF Name of Drug	ERENCE LISTED DE		HAT IS THE BASIS	FOR TH	E SUBMISSION	
TYPE OF SUBMISSION (check one)	ORIGINAL APPLICATION	N D AI	MENDMENT TO A PE	NDING AP	PLICATION RESUBMISSION	
PRESUBMISSION ANNUAL	REPORT	_	NT DESCRIPTION SI			NT
LABELING SUPPLEMENT	CHEMISTRY MANUFAC	. —			OTHER .	
IF A SUBMISSION OF PARTIAL APPLICATION,	PROVIDE LETTER I	DATE OF AGREE	MENT TO PARTIAL	L SUBMIS	SSION:	
IF A SUPPLEMENT, IDENTIFY THE APPROPRI	IATE CATEGORY		BE CBE	-30	Prior Approval (PA)	
REASON FOR SUBMISSION Response to	Requets for	Information	9/6, 9/7, and	9/19, 2	001	
PROPOSED MARKETING STATUS (check one)	PRESCRIP	TION PRODUCT (Rx) D c	OVER THE	COUNTER PRODUCT. (OTC)	
NUMBER OF VOLUMES SUBMITTED 1		THIS APPLICATIO		ER 😨	PAPER AND ELECTRONIC	ELECTRONIC
ESTABLISHMENT INFORMATION (Full esti Provide locations of all manufacturing, peckaging address, contact, telephone number, registration conducted at the site. Please indicate whether the	and control sites for number (CFN), DMF	r drug substance at number, and man	nd drug product (co sufacturing steps as	ontinuation ind/or type	n sheets may be used if necessary).	Include name, Stability testing)
Cross References (list related License Ap	plications, INDs, N	DAs, PMAs, 510	(k)s, IDEs, BMFs	s, and DN	NFs referenced in the current ap	plication)
IND NDA 17-51	2 NDA 20	-163 ND	A 20-183	DMF	DMF	
DMF(

3. Surial 4. Ch A. B. C. S. No 6. Hu 7. Cli 8. Cli 9. Sa 10. Sta 11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fie 18. Us 19. Fir 20. O' CERTIFICATIO I agree to upda wamings, preceduled by Fire to upda wamings,								
4. Ch A. B. C. 5. No 6. Hu 7. Cli 8. Cli 9. Sa 10. Sta 11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fix 18. Us 19. Fix 20. O' CERTIFICATIO I agree to upda warnings, prec requested by Fix cluding, but r 1. Good mr 2. Biologic 3. Labeling 4. In the ca 5. Regulat 7. Local, s if this application of the data and in the call Warning: A w SIGNATURE O' ADDRESS (Str. Public reportings of the colors of the call of the ca		X Draft Labeling	☐ Final Printed Labeling					
4. Ch A. B. C. 5. No 6. Hu 7. Cli 8. Cli 9. Sa 10. Sta 11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fix 18. Us 19. Fix 20. O' CERTIFICATIO I agree to upda warnings, prec requested by Fix cluding, but r 1. Good mr 2. Biologic 3. Labeling 4. In the ca 5. Regulat 7. Local, s if this application of the data and in the call Warning: A w SIGNATURE O' ADDRESS (Str. Public reportings of the colors of the call of the ca	Summary (21 CFR 314.50 (c))							
B. C. 5. No 6. Hu 7. Cli 8. Cli 9. Sa 10. Sta 11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fie 18. Us 19. Fi 20. O' CERTIFICATIO I agree to upda warnings, prec requested by Fi including, but r 1. Good rr 2. Biologic 3. Labeling 4. In the ca 5. Regulat 7. Local, s If this application of the data and in the call of the	4. Chemistry section							
C. 5. No 6. Hu 7. Cli 8. Cli 9. Sa 10. Sta 11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fit 18. Us 19. Fit 20. O' CERTIFICATIO I agree to upda warnings, prec requested by Firchuding, but r 1. Good mr 2. Biologicati yarnings, and this applicati product until the case of this applicati product until the case of the cas	A. Chemistry, manufacturing, ar	nd controls information (e.g.	., 21 CFR 314.50(d)(1); 21 (CFR 601.2)				
5. No 6. Hu 7. Cli 8. Cli 9. Sa 10. Sta 11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fie 18. Us 19. Fil 20. O' CERTIFICATIO I agree to upda wamings, prec requested by Firchuding, but r 1. Good rr 2. Biologic 3. Labeling 4. In the ca 5. Regulat 6. Regulat 7. Local, s If this application product until the data and it Warning: A w SIGNATURE OF ADDRESS (Str.) Public reporting the control of the c	3. Samples (21 CFR 314.50 (e)	(1); 21 CFR 601.2 (a)) (Sui	bmit only upon FDA's reque	st)				
6. Hu 7. Cli 8. Cli 9. Sa 10. Sta 11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fit 18. Us 19. Fit 20. O' CERTIFICATIO I agree to updawamings, precrequested by Finchuding, but r 1. Good mr 2. Biological Salabeling, but r 2. Biological Salabeling, but r 3. Labeling Salabeling	C. Methods validation package (e.g., 21 CFR 314.50(e)(2)(i); 21 CFR 601.2)							
7. Cli 8. Cli 9. Sa 10. Sta 11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fie 18. Us 19. Fil 20. O' CERTIFICATIO I agree to upda wamings, precrequested by Firchuding, but roward to the control of the co	5. Nonclinical pharmacology and toxicology section (e.g., 21 CFR 314.50(d)(2); 21 CFR 601.2)							
8. Cli 9. Sa 10. Sta 11. Ca 11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fit 18. Us 19. Fit 20. O' CERTIFICATIO I agree to upda warnings, prec requested by Firchuding, but r 1. Good m 2. Biologic 3. Labeling 4. In the ca 5. Regulat 7. Local, s if this application product until the cata and in the data	Human pharmacokinetics and b	ioavailability section (e.g., 2	21 CFR 314.50(d)(3); 21 CF	R 601.2)				
9. Sa 10. Sta 11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fid 18. Us 19. Fil 20. O' CERTIFICATION I agree to updawamings, precequested by Firchuding, but in 2. Biologic 3. Labeling 4. In the case of this application product until the product until the product until the case of the data and in the dat	Clinical Microbiology (e.g., 21 C	FR 314.50(d)(4))						
10. Sta 11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fid 18. Us 19. Fid 20. O' CERTIFICATIO I agree to upda warnings, precedured by Fid Code of Cartification of Ca	Clinical data section (e.g., 21 Cl	FR 314.50(d)(5); 21 CFR 6	01.2)					
11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fie 18. Us 19. Fie 20. O' CERTIFICATION I agree to updawamings, precequested by Firchulding, but in 2. Biologica 3. Labeling 4. In the case of this application product until the product until the product until the case of this application of the data and in	Safety update report (e.g., 21 C	FR 314.50(d)(5)(vi)(b); 21 (CFR 601.2)					
11. Ca 12. Ca 13. Pa 14. A 15. Es 16. De 17. Fie 18. Us 19. Fie 20. O' CERTIFICATION I agree to updawamings, precequested by Firchulding, but in 2. Biologica 3. Labeling 4. In the case of this application product until the product until the product until the case of this application of the data and in	Statistical section (e.g., 21 CFR	314.50(d)(6); 21 CFR 601.	.2)					
12. Ca 13. Pa 14. A 15. Es 16. De 17. Fie 18. Us 19. Fie 20. O' CERTIFICATIO I agree to upda warnings, prec requested by Firchuding, but r 1. Good m 2. Biologic 3. Labeling 4. In the ca 5. Regulat 7. Local, s If this application product until the data and in the data an	Case report tabulations (e.g., 21		·					
13. Pa 14. A 15. Es 16. De 17. Fid 18. Us 19. Fid 20. O' CERTIFICATION I agree to updawamings, precedured by the production of the product until th	Case report forms (e.g., 21 CFR							
14. A 15. Es 16. De 17. Fie 18. Us 19. Fil 20. O' CERTIFICATIO I agree to upda warnings, precipulated by Firebuding, but in 2. Biological 3. Labeling 4. In the cases and in the cases are product until the data and in the data and	Patent information on any pater							
15. Es 16. De 17. Fid 18. Us 19. Fid 20. O' CERTIFICATIO I agree to upda warnings, precipusted by Fid 1. Good m 2. Biological 3. Labeling 4. In the circles application product until the product until the product until the data and in the data	A patent certification with respe	-		b)(2) or (j)(2)(A))				
16. De 17. Fie 18. Us 19. Fie 20. O' CERTIFICATIO I agree to upda wamings, precipulating, but in 2. Biologic 3. Labeling 4. In the case 5. Regulating 7. Local, sift this application product until the data and it warning: A w SIGNATURE OF ADDRESS (Str.) Public reporting 17. Local signature of the case and it warning: A w SIGNATURE OF The case o	Establishment description (21 C							
17. Fit 18. Us 19. Fit 20. O' CERTIFICATION I agree to update warnings, precipe sted by Fit Coulding, but in 1. Good in 2. Biological 3. Labeling, 4. In the case of this application product until the data and it warning: A wa	Debarment certification (FD&C							
18. Us 19. Fil 20. O' CERTIFICATION I agree to upda warnings, prec requested by Fircheding, but in 1. Good in 2. Biologic 3. Labeling 4. In the case 5. Regulat 6. Regulat 7. Local, s If this application product until the The data and in Warning: A w SIGNATURE OF Public reporting the case Public reporting the case Public reporting the case of the case Public reporting the case of the	17. Field copy certification (21 CFR 314.50 (k)(3))							
19. File 20. O'CERTIFICATION 20. O'CERTIFICATION 20. O'CERTIFICATION 20. Biological 3. Labeling 4. In the case of this application of the data and in the data	18. User Fee Cover Sheet (Form FDA 3397)							
20. O' CERTIFICATIO I agree to upda warnings, prec requested by F including, but in 1. Good in 2. Biologic 3. Labeling 4. In the ca 5. Regulat 6. Regulat 7. Local, s if this applicati product until th The data and in Warning: A w SIGNATURE O' ADDRESS (Sim	19. Financial Information (21 CFR Part 54)							
CERTIFICATION I agree to update warnings, precipe tequested by Fireducing, but in 2. Biologica 3. Labeling 4. In the case of this application of the data and in the data and	OTHER (Specify)							
warnings, precrequested by Finchuding, but in 1. Good in 2. Biologic 3. Labeling 4. In the case of 5. Regulat 6. Regulat 6. Regulat 7. Local, sif this application of the data and it warning: A warni	TION							
ADDRESS (Sim	y FDA. If this application is approut not limited to the following: manufacturing practice regulations are establishment standards in ling regulations in 21 CFR Parts are case of a prescription drug or lations on making changes in applications on Reports in 21 CFR 3-1, state and Federal environmentation applies to a drug product to the Drug Enforcement Adminis	coved, I agree to comply with clons in 21 CFR Parts 210, 2 of 21 CFR Part 600. Is 201, 606, 610, 660, and/or biological product, prescript pplication in FD&C Act Sect 14.80, 314.81, 600.80, and otal impact laws. that FDA has proposed for stration makes a final schedu thave been reviewed and, to	n all applicable laws and reginal applicable regulations ar 809. It is a solution of the solution 506A, 21 CFR 314.71, 5600.81. It is cheduling under the Control uling decision. It is to the best of my knowledge.	·	cations, .			
Public report	OF RESPONSIBLE OFFICIAL OR,	·····	E AND TITLE	DATE /				
Public report	rykaykyo	KCRU Mary Ka	y Rybicki, Assoc. Dir	., Regulatory Affairs ///	30/0			
instructions,	Street, City, State, and ZIP Code)	1620 Waukegan Roa	d	Telephone Number				
instructions,		McGaw Park, IL 600	85	() 847-473-6361				
ਹਾਂਤ burden to		ction of information is e		irs per response, including the tim	e for re			
Department of Food and Drug CBER, HFM-9 1401 Rockville	porting burden for this collect s, searching existing data son n. Send comments regarding thi	urces, gathering and mair	ntaining the data needed, other aspect of this collection	n of information, including suggestion	e collec			

DIVISION OF CARDIO-RENAL DRUG PRODUCTS FOOD AND DRUG ADMINISTRATION



Woodmont II 1451 Rockville Pike Rockville, MD 20852

This document is intended only for the use of the party to whom it is addressed and may contain information that is privileged, confidential, and protected from disclosure under applicable law. If you are not the addressee, or a person authorized to deliver the document to the addressee, you are hereby notified that any review, disclosure, dissemination, copying, or other action based on the content of this communication is not authorized. If you have received this document in error, please immediately notify us by telephone and return it to: CDER, DCRDP (HFD-110); 5600 Fishers Lane; Rockville, MD 20857

Transmitted to FAX Number:

(847) 473-6952

Attention:

Ms. Mary Kay Rybicki

Company Name:

Baxter Healthcare Corporation

Phone:

(847) 473-6361

Subject:

FDA Participants,

November 9, 2001 Teleconference

Date:

November 16, 2001

Pages including this sheet:

2

From:

Quynh Nguyen, Pharm.D.

Phone:

(301) 594-5311

Fax:

(301) 594-5494

Dear Mary Kay,

Per your request, please find attached a list of the FDA participants from the November 9, 2001 teleconference for NDA 21-321/Extraneal. If you have any questions, please do not hesitate to contact me at the above numbers.

Thanks. Quynh

PLEASE LET ME KNOW YOU RECEIVED THIS. THANKS!

BAXTER HEALTHCARE CORPORATION

1620 Waukegan Road McGaw Park, IL 60085

Fax Cover Sheet

DATE:

November 13, 2001

TIME:

1:16 PM

TO:

Quynh Nguyen, Pharm.D.

PHONE:

301-594-5311

FDA/CDER/DCRDP

FAX:

301-594-5494

FROM:

M.K. Rybicki

PHONE:

847-473-6361

Baxter Regulatory Affairs

FAX:

847-473-6952

RE:

NDA 21-321, Extraneal (7.55 icodextrin) PDS

CC:

Number of pages including cover sheet: 4

Message

Dear Quynh:

Please find attached the proposed Clinical Studies and Serum Electrolytes sections of the Extraneal Labeling. This information is being provided in follow-up to the teleconference held on November 9, 2001. The Baxter attendees for that teleconference were:

Richard Newman, PhD.

VP Regulatory Affairs

Marsha Wolfson, M.D.

VP Global Clinical Affairs

Please do not hesitate to contact me at 847-473-6361 if you have any questions.

Sincerely yours

Mary Kay Rybicki

Associate Director, Regulatory Affairs

pages redacted from this section of the approval package consisted of draft labeling

BAXTER HEALTHCARE CORPORATION

1620 Waukegan Road McGaw Park, IL 60085

Fax Cover Sheet

DATE:

November 14, 2001

TIME:

9:41 AM

TO:

Quynh Nguyen, Pharm.D. FDA/CDER/DCRDP

PHONE: FAX:

301-594-5311 301-594-5494(5)

Mary Kay Rybicki

301-334-3434(3)

Baxter Regulatory Affairs

PHONE: FAX:

847-473-6361 847-473-6952

RE:

FROM:

NDA 21-321, Extraneal (7.5% icodextrin) PDS

CC:

Number of pages including cover sheet: 17

Dear Quynh:

In follow-up to Baxter's conversation with Dr. Doug Throckmorton this morning, I am faxing to you a copy of draft labeling for Extraneal with changes discussed in the telephone conversation. Please note that the other changes requested at the November 9, 2001 teleconference have been incorporated except for the representation of the non-proprietary name and the statement requested at the end of the Carcinogenesis, Mutagensesis, Impairment of Fertility section. These two items are under discussion with the respective reviewers, with resolution expected later this week.

Thanks you for your help. Please do not hesitate to contact me at 847-473-6361 if you have any questions.

Mary Kay Mary Kay Rybecki

pages redacted from this section of the approval package consisted of draft labeling

RENAL REG AFFAIRS

Fax:8474736952

** Transmit Conf.Report **

P. 1

Nov 14 2001 9:32

Fax/Phone Number	Mode	Start	Time	Page	Result	Note
93015945495	NORMAL	14, 9:32	6'01"	17	* 0 K	Manua 1

Mary Kay Rybickl

To: THROCKMORTON@CDER.FDA.GOV

11/19/2001 08:48 AM

cc: NGUYENQ@CDER.FDA.GOV Subject: EXTRANEAL NDA 21-321

RE: Extraneal NDA 21-321, Draft Labeling - Serum Electrolytes- Change in Patient Numbers <125mmol/L for Control

Dear Dr. Throckmorton:

Per your volcemail, Baxter is providing via E-mail the change in numbers of control patients whom developed serum sodium values less than 125 mmol/L. In the fax of November 14, 2001 the numbers of patients were described as 4 Extraneal and 3 control. During annotation of the proposed labeling, it was noted that one of the control patients participated in study RD-97-CA-130 and experienced a serum sodium value of < 125mmol/L at the last visit (4 weeks). This patient then rolled over into study RD-97-CA-131. The 4 week value from the 130 study became the 4 week value for the 131 study. Thus, this was one patient who had a serum sodium value < 125mmol/L at only one time point, but was counted twice.

The patients with serum sodium <125mmol/L are described below:

CONTROL:

Study 130 over into study		Value= 124 at Week 4 (originally counted twice as this patient rolled
Study 131	Patient 22301	Value= 124 at Week 39
EXTRANEAL:		
Study 131	Patient 06201	Value= 124 at Week 13

Study 131 Patient 18302 Value= 119 at Week 39
Study 131 Patient 24301 Value= 124 at Week 39
Study 131 Patient 32501 Value= 123 at Week 13 and Value= 124 at Week 26

The proposed serum electrolyte section, with annotation to NDA 21-321, should read as follows:

Serum Electrolytes	
-	Volume 1.31 Page 077 Volume 1.38 Page 088 Volume 1.54 Page 062 Volume 1.34 page 272 Volume 1.45 Page 214 Volume 1.45 Page 201 Volume 1.45 Page 218

Baxter will amend NDA 21-321 with the labeling changes provided by fax on November 13, 14 and the change described in this e-mail. In addition, disucssions are anticipated to conclude today (November 19, 2001) with the Pharmacologist, Dr. Jim Willard, regarding the pre-clinical statement requested in the

teleconference of November 9, 2001. Baxter has been in discusion with Dr. Willard reagarding his request to add the statment

to the Carcinogenesis,

Mutagensesis, and Impairment of Fertility section. Baxter does not agree that data support this statment.

Please do not hesitate to contact me at 847-473-6361 if you have any questions of comments.

Mary Kay Rybicki



Food and Drug Administration Rockville, MD 20857

NDA 21-321

INFORMATION REQUEST LETTER

Baxter Health Care Corporation Attention: Mary Kay Rybicki Associate Director, Regulatory Affairs 1620 Waukegan Road McGaw Park, IL 60885-6730

Dear Ms. Rybicki:

Please refer to your December 20, 2000 new drug application (NDA) submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for Extraneal (7.5% Icodextrin) Peritoneal Dialysis Solution.

We also refer to your submissions dated March 20, 2001 May 16, 2001 May 23,2001 June 13, 2001.

We are reviewing the Chemistry, Manufacturing and Controls section of your submission and have the following comments and information requests. We request a prompt written response in order to continue our evaluation of your NDA.

Regarding update of ML Laboratories DMF for Icodextrin: There are some issues related to DMF which need to be resolved. The DMF holder has been informed to address these issues and update their DMF as per Lorna Clisby's e-mail of April 20, 2001.

Regarding Specifications of Icodextrin:

Please include % Mass in Range (Molecular Weight Distribution) in the drug substance icodextrin specifications. Weight Average Molecular Weight (Mw), Number Average Molecular Weight (Mn) and % Mass in range (Mw) specifications should all be similar to those included in ML Laboratories specifications of drug substance icodextrin.

Regarding

. Method Validation of the drug product:

In the experimental design, please clearly describe the purpose of various control and test articles. For specificity, it was difficult to understand the purpose of test and control articles,

experimental design, and how the results proved the specificity of the method. Please clarify these issues.

To prove the ruggedness you have done re-assay of same solution after 24 hours which is not sufficient. Ruggedness is the ability of the procedure to provide analytical results of acceptable accuracy and precision under changed conditions of the test procedure. To prove the ruggedness please repeat the procedure taking into account the variations that may be expected when the same defined procedure of analysis is employed using different personnel, laboratories and equipment etc.

Regarding Regulatory Specification of the drug product Extraneal (7.5% icodextrin) PDS:

In addition to Number Average Molecular Weight and Weight Average Molecular Weight, please include % Mass in Range (Molecular Weight Distribution) in the regulatory and shelf-life specification of the drug product. Please also include an identification method in the product specification.

Extractables such as specifications with limits.	should also be included in the regulatory
Regarding	Method Validation for the drug product
Extraneal (7.5% icodextrin) PDS	:
Please provide a full method validate	tion report for the method
for the parameters Number Average and % Mass in range (Mw).	e Molecular Weight, Weight Average Molecular Weight



Regarding stability protocols, stability data and expiration date of drug product:

The		method alone cannot b	e considered	stability indic	ating since	breakdown
of icode	xtrin to smal	ller units is also likely to	o contribute to	overall speci	fic	-
Therefo	re, the assay	by	will no	t properly refl	ect degrada	tion products
and can	not be consid	dered a stability indicati	ng method. P	lease revise a	ll stability p	protocols to
include	testing of N	umber Average Moleci	ılar Weight, ^y	Weight Avera	ge Molecul	lar Weight
and % N	Mass in range	e (Molecular Weight Di	stribution).	_	_	-

The stability data and supporting clinical stability data provided and not sufficient to approve an expiration date of 24 months; instead an expiration date of — months can be granted at this time.

Regarding Extractable from containers:

The stability data provided in this NDA includes some tests for extractable items but you have not discussed the issue of extractables which is an important consideration for this product. The test for was removed from the stability protocol of first three production lots (Table III from Vol. 1.4, page 190) and no explanation was given. You have not discussed or monitored components in any of the stability studies. Please address these issues and provide full information about the possible extractable items and studies/tests for monitoring their levels in Extraneal. Please include all extractable products in the stability protocol of the first 3 post-approval production lots. Data from these studies will determine the extent to which further monitoring of annual commercial production batches will be necessary.

Regarding labeling of the final product:

Various –OH groups are missing but the bonds are still there which in standard organic chemistry terminology implies that there are CH₃ groups. The 1,4 linkage shown in the chemical structure of icodextrin in the package insert and various other places in the NDA represents the fragment "-CH₂OCH₂-" rather than "-O-". Please correct the icodextrin structure to remove the extra –CH₂ groups and to show all "-OH" groups. You may use the icodextrin structure similar to the one given in the USP Dictionary (2000) but including both 1,4 and 1,6 linkages.

The container labels (primary and secondary) have two different storage statements. Please revise the storage temperature statement on all labels including package insert to the following:

"Store at 20°C-25°C (68-77°F) [see USP Controlled Room Temperature]"

The adhesive labels provided have the container abbreviated as "CONT" which is confusing; please replace it with "CONTAINER". The adhesive labels also have too much information irrelevant to the actual label. Please provide copies of the adhesive labels with the final information, which will go on cardboard cartons and also submit a sample copy of the cardboard carton with adhesive label. The carton labels contain "7.5" in a rectangular box; please clarify its purpose and inform if this is the final format.

If you have any questions, call John Guzman, Regulatory Health Project Manager, at (301) 594-5312.

Sincerely,

15/

Kasturi Srinivasachar, Ph.D.
Chemistry Team Leader, DNDC I for the
Division of Cardio-Renal Drug Products, HFD-110
DNDC 1, Office of New Drug Chemistry
Center for Drug Evaluation and Research

This is a representation of an electronic record that was signed electronically and this page is the manifestation of the electronic signature.

/s/

===.

Kasturi Srinivasachar 9/7/01 05:12:11 PM



Food and Drug Administration Rockville MD 20857

NDA 21-321

Baxter Healthcare Corporation Attention: Steven Engel, PharmD 1620 Waukegan Road McGaw Park, IL 60085

Dear Dr. Engel:

We have received your new drug application (NDA) submitted under section 505(b) of the Federal Food, Drug, and Cosmetic Act for the following:

Name of Drug Product: Extraneal (icodextrin) 7.5% w/v PD Solution

Review Priority Classification: Standard (S)

Date of Application: December 22, 2000

Date of Receipt: December 22, 2000

Our Reference Number: NDA 21-321

Unless we notify you within 60 days of our receipt date that the application is not sufficiently complete to permit a substantive review, this application will be filed under section 505(b) of the Act on February 20, 2001 in accordance with 21 CFR 314.101(a). If the application is filed, the primary user fee goal date will be October 22, 2001 and the secondary user fee goal date will be December 22, 2001.

Please cite the NDA number listed above at the top of the first page of any communications concerning this application. All communications concerning this NDA should be addressed as follows:

U.S. Postal Service:

Food and Drug Administration
Center for Drug Evaluation and Research
Division of Cardio-Renal Drug Products,
HFD-110
Attention: Division Document Room
5600 Fishers Lane
Rockville, Maryland 20857

Courier/Overnight Mail:

Food and Drug Administration
Center for Drug Evaluation and Research
Division of Cardio-Renal Drug Products,
HFD-110
Attention: Division Document Room
1451 Rockville Pike
Rockville, Maryland 20852-1420

If you have any questions, please call:

Mr. John Guzman Regulatory Project Manager (301) 594-5312

Sincerely,

Natalia A. Morgenstern
Chief, Project Management Staff
Division of Cardio-Renal Drug Products
Office of Drug Evaluation I
Center for Drug Evaluation and Research